

Type SP-061

Split-core outdoor current transformer

Product features

- 600 V outdoor, 10 kV BIL, 60 hertz
- Single, dual, and multi-ratios
- Primary current ratios: 200:5 to 5000:5
- Aluminum shell, split-core

Application

The SP-061 outdoor split-core bushing current transformer (BCT) is a 600 volt, 10 kV BIL rated unit. This unit can be applied over higher rated system voltages, provided sufficient insulation is available on the point of application. Primary current ratios are available from 200:5 to 5000:5 with a rating factor of up to 2.0. This unit is convenient to install where the primary conductor cannot be broken or opened. This dry-type, solid-cast, split-core current transformer operates with reasonable accuracy for metering or relay applications.

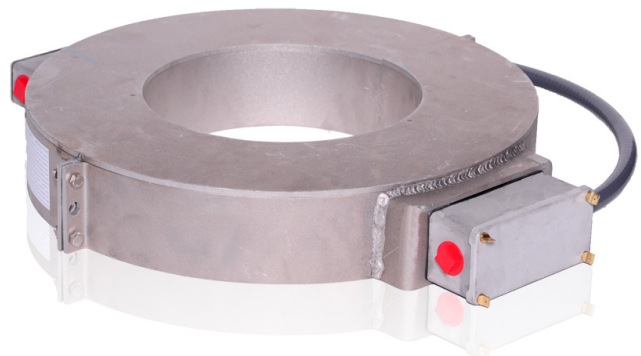
Mechanical description

The core and coil assembly is fully encapsulated with resin and then on three sides with an aluminum shell. The aluminum shell, provided in a variety of window sizes, is cut in half to provide the split core capability and also serves as a ground shield. The core halves on the side opposite the flexible conduit can be opened as far as needed to fit around the conductor. Once in place, the halves are joined back together and secured with stainless steel hardware. For permanent installations it is recommended that silicone RTV be used to seal the core gap areas from ingress of moisture.

The flexible weather-tight conduit is used to interconnect the two winding halves together. The leads are pre-wired and should not be removed. All connections from the bottom half of the core are terminated to their dedicated positions. These connections need not be removed while wiring the secondary circuit. The metallic main conduit box contains the secondary terminals for instrumentation wiring, and the small metallic terminal box, opposite the main box, does not need to be opened or removed and is so marked on its cover. The secondary terminals are ¼"-20 studs with flat, lock, and cupped washers located. The conduit box has one (1) 1"-11.5 NPT hub available.

Testing

Each unit is individually tested per IEEE C57.13, including dielectric tests, accuracy and polarity.



Accuracy performance

The SP-061 can provide up to 0.3 class accuracy for metering with burdens of B-0.1 up to B-1.8, and up to C800 for relay applications (ratings are specific to each ratio). The transformer is accurate through its rating factor and can be used continuously to this level.

Mounting

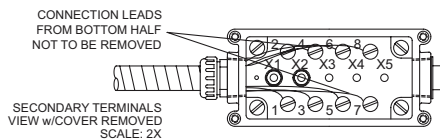
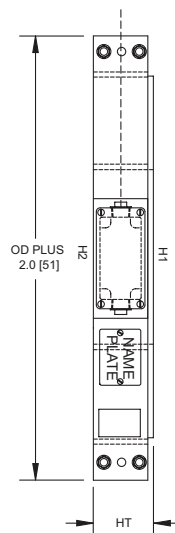
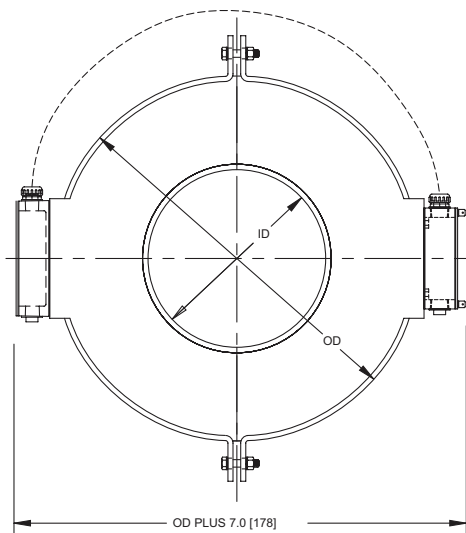
The SP-061 is designed for mounting around the bushings of a power transformer, circuit breaker, or cable terminator (pothead). The unit must be mounted on a flat surface to eliminate any tension on the seams of the split-core CT. Resin pads can be provided to eliminate any water welling. It is important that no metallic bracket or plate extend from the OD to the ID on the H2 (bottom) side, as this will create a shorted electrical turn around the core and cause misoperation of the current transformer.

Options

The SP-061 can be offered in various window sizes. Through careful calculation, steel selection, and testing, existing current transformer characteristics can be matched with split-core current transformers on special order. Existing characteristic curves are required. Contact the factory for other needs.

Unit dimensions

Dimensions shown in inches [mm].



Ordering information

When ordering split-core CTs, include the following information:

- Minimum inside diameter (ID): _____ in. [mm]
- Maximum outside diameter (OD): _____ in. [mm]
- Maximum allowable height (HT): _____ in. [mm]
- Current ratio and taps, if any: _____ (:5 or :1A/SR, DR, MR)
- Accuracy and burden requirements, for example:
 - Metering: _____ (0.3B-0.1 through B-1.8)
 - Relaying: _____ (C100, C200, C400, or C800, or other)
- If IEC ratings, list class & burden: _____ (e.g. class 0.2-20 VA, 5P20-40 VA)
- Continuous rating factor: _____ (std. is RF=2.0)
- Frequency: _____ (std is 60 Hz)
- Conduit box hub size: _____ (std is 1" NPT)

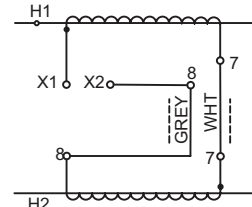
Test reports

IEEE test reports are stored electronically and can be e-mailed in various formats at the time of shipment.

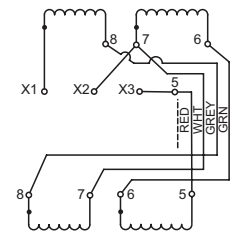
Standards

This unit meets all applicable IEEE and NEMA standards and can be made to meet other standards, such as CSA or IEC, as requested.

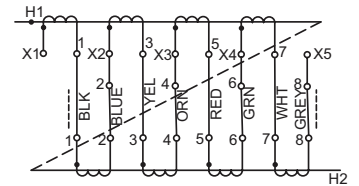
Wiring diagrams



Single ratio



Dual ratio



Multi ratio

For more information please contact:

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